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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/909,845	07/20/2001	A. John Speranza	PES-0042	8798
23462	7590	06/02/2004		
CANTOR COLBURN, LLP			EXAMINER	
55 GRIFFIN ROAD SOUTH			SINES, BRIAN J	
BLOOMFIELD, CT 06002			ART UNIT	PAPER NUMBER
			1743	

DATE MAILED: 06/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/909,845	Applicant(s) SPERANZA ET AL.
	Examiner Brian J. Sines	Art Unit 1743

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received after the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 19 March 2004.
 2a) This action is **FINAL**. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-28 and 43-47 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) Claim(s) _____ is/are allowed.
 6) Claim(s) 1-15, 17-20, 22-26 and 43-47 is/are rejected.
 7) Claim(s) 16, 21, 27 and 28 is/are objected to.
 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1.) Certified copies of the priority documents have been received.
 2.) Certified copies of the priority documents have been received in Application No. _____.
 3.) Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
 2) Notice of Draftsperson's Patent Drawing Review (PTO-848)
 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
 Paper No(s)/Mail Date _____
- 4) Interview Summary (PTO-413)
 Paper No(s)/Mail Date: _____
- 5) Notice of Informal Patent Application (PTO-152)
 6) Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless ~

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(e) of this title before the invention thereof by the applicant for patent.

1. Claims 1 and 2 are rejected under 35 U.S.C. 102(b) as being anticipated by Young et al. (U.S. Pat. No. 5,037,518). Regarding claims 1 and 2, Young et al. teach an apparatus comprising: an electrochemical cell (C); an electrical energy source or power supply configured for providing a quantity of electrical energy to the electrochemical cell; a sensing apparatus (pressure transducer 38) in operable communication with a gas output from the electrochemical cell, wherein the sensing apparatus is adapted to provide an output signal indicative of a parameter (e.g., pressure of hydrogen gas) of the gas output; a computer (e.g., SCR circuits 505) in operable communication with the sensing apparatus and the electrical energy source, wherein the computer includes a memory device configured to store a first operational parameter; and a processor configured to receive a digital representation of the output signal and first operational parameter, wherein the processor is configured to compare the digital representation of the output signal to the first operational parameter and to regulate the quantity of energy provided to the electrochemical cell in response thereto (see col. 6, lines 13 – 23; col. 8, lines 1 – 14).

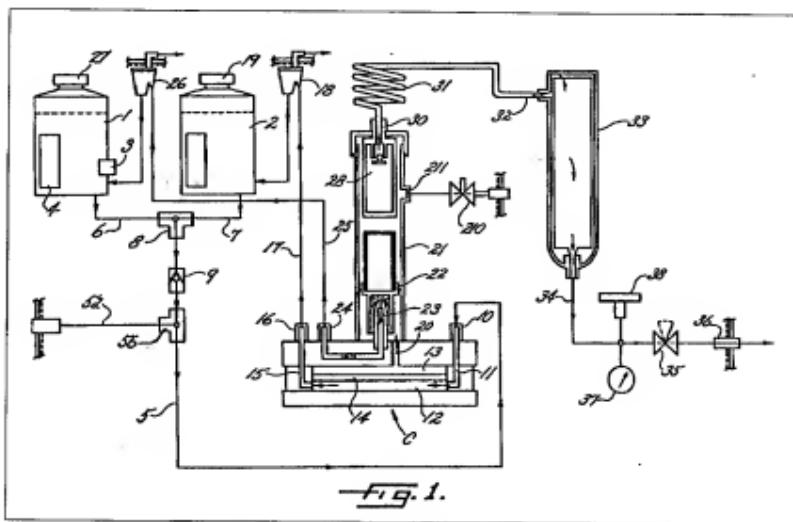


FIG. 1.

2. Claims 1 – 15, 17 – 20, 22 – 26 and 43 – 47 are rejected under 35 U.S.C. 102(e) as being anticipated by Bossard (U.S. Pat. No. 6,303,009 B1). Regarding claims 1, 2, 43 and 47, Bossard teaches an apparatus and method of operating the apparatus, wherein the apparatus comprises: an electrochemical cell (20); an electrical energy source or power supply (27) configured for providing a quantity of electrical energy to the electrochemical cell; a sensing apparatus (e.g., pressure sensors 56, 54 & 59) in operable communication with a gas output from the electrochemical cell, wherein the sensing apparatus is adapted to provide an output signal indicative of a parameter (e.g., gas pressure) of the gas output; a computer (central systems controller 16) in operable communication with the sensing apparatus and the electrical energy source, wherein the computer includes a memory device configured to store a first operational parameter; and a processor configured to receive a digital representation of the output signal and

first operational parameter, wherein the processor is configured to compare the digital representation of the output signal to the first operational parameter and to regulate the quantity of energy provided to the electrochemical cell in response thereto (see col. 3, lines 30 – 67; col. 4, lines 1 – 67; col. 5, lines 1 – 65; figure 1). Regarding claims 3 – 12 and 44 - 47, these claims recite various functional limitations. However, these claims are drawn to an apparatus statutory class of invention. These claims recite no other structural limitations to delineate the claimed apparatus from the apparatus disclosed by the prior art. The applicant is advised that the Courts have held that apparatus claims must be structurally distinguishable from the prior art in terms of structure, not function. See *In re Danley*, 120 USPQ 528, 531 (CCPA 1959); and *Hewlett-Packard Co. V. Bausch and Lomb, Inc.*, 15 USPQ2d 1525, 1528 (Fed. Cir. 1990). The Courts have held that the manner of operating an apparatus does not differentiate an apparatus claim from the prior art, if the prior art apparatus teaches all of the structural limitations of the claim. See *Ex Parte Masham*, 2 USPQ2d 1647 (BPAI 1987) (see MPEP § 2114). Regarding claims 13 – 15, 17 – 20, 22 – 26, Bossard teaches all of the structure of the apparatus provided in the claimed method, which merely recites the conventional operation of that apparatus. Bossard teaches a method of operation where gas output is computer controlled by decreasing or increasing the electrical current to the proton exchange membrane (see col. 5, lines 1 – 67). Regarding process or method claims, a prior art device anticipates a claimed process, if the device carries out the process during normal operation (see MPEP § 2112.02). The Courts have held that when a prior art device is the same as a device described in the specification for carrying out the claimed method, it can be assumed that the device will inherently perform the claimed process. See *In re King*, 801 F.2d 1324, 231 USPQ 136 (Fed. Cir. 1986).

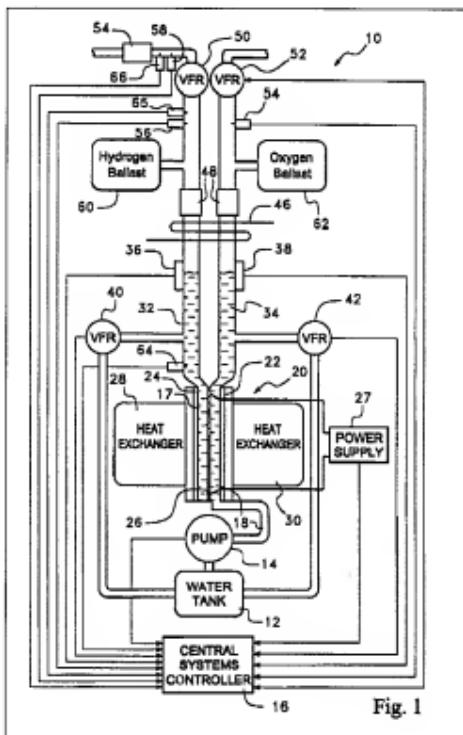


Fig. 1

Response to Arguments

Applicant's arguments with respect to claims 1 – 28 have been considered but are moot in view of the new ground(s) of rejection.

Allowable Subject Matter

Claims 16, 21, 27 and 28 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: The cited prior art neither teach or fairly suggest that the method further comprise a step of adjusting at least one of a predetermined operating value and predetermined variance based upon feedback from the electrical source. The cited prior art neither teach or fairly suggest that the method further comprise a step for determining a predetermined value based upon the quantity of electrical energy to the electrochemical cell.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian J. Sines, Ph.D. whose telephone number is (571) 272-1263. The examiner can normally be reached on Monday - Friday (11:30 AM - 8 PM EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jill A. Warden can be reached on (571) 272-1267. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Jill Warden
Supervisory Patent Examiner
Technology Center 1700